

LISTING OF CLAIMS

1-6. (canceled)

7. (currently amended) ~~The semiconductor carrier structure of Claim 1~~ A semiconductor carrier structure for mounting semiconductor chips comprising:

a semiconductor substrate comprising a substrate material having a first coefficient of thermal expansion and a first elastic modulus;

at least one constant diameter through-via in said semiconductor substrate, wherein each of said through-vias is filled with a conductive structure having a second coefficient of thermal expansion which is less than or substantially the same as the first coefficient of thermal expansion and a second elastic modulus which is less than or equal to the first elastic modulus, wherein said each conductive structure comprises a first conductive via material disposed in annular shape along the sidewalls of said through-via, said annular shape having an annular diameter which is said constant diameter and having a core structure comprising a second via material disposed within said annular shape and having a core diameter which is less than said constant diameter.

8. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises an insulating material.

9. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises a conducting material.

10. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises said substrate material.

11. (original) The semiconductor carrier structure of Claim 7 wherein said second via material is selected from the group consisting of polyimide, thermid, KJ, photosensitive polyimide, SiLK, or other high-temperature polymer.

12. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises a material having a third coefficient of thermal expansion which is less than or about equal to said first coefficient of thermal expansion.

13. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises silicate glass.

14. (original) The semiconductor carrier structure of Claim 7 wherein said second via material comprises of silica or a silicate glass-filled high temperature polymer.

15-42. (canceled)